Environmental Protection Agency
Office of Emergency and Remedial Response
TECHNICAL DIRECTION FORM
Region 3 - ESAT

Contract No.: EP-W-06-016

Contractor: Lockheed/Martin Srvcs Inc.

Task Order No.: 0037

Sub-Task No.:

Technical Direction No. 01079A Revised

Task Order Project Officer: Colleen K. Walling Phone: (410) 305-2763

Description of Task: **Provide Data Review Data Validation other related DV support tasks for the Dimock Site fast turn-around-time analyses & data review - Highest Priority**

Account Number: **2012TO3N303DC6A3TARS00**

Deliverable Due Date: **for 2/1/2012 – 2/14/2012 48 hr TAT from receipt of data**

TASK DESCRIPTION: **DIMOCK Site** **High Priority**

ESAT shall perform data validation and data review including related support task activities as highest priority fast turnaround time within 48 hrs or less for this Superfund site for the parameters listed in the attachments; **and any other parameters included in the data packages as requested (e.g., metals, semi-volatiles, etc.) for very fast TAT.**

ESAT shall follow the SOPs, Task Order SOW, and all guidance documents to the best of their ability, and utilize their technical expertise for review of data received from either the Contract Laboratory Program (CLP); and/or, from Tier IV, 3rd party outside laboratories for the parameters listed in the attachments.

ESAT shall discuss with the Technical Monitors any concerns or anomalies with the data.

ESAT shall not hold up the data review process to perform the CEAT audits. The CEAT audits can be performed at a later date after the data reviews/data validations have been completed. However, ESAT shall note missing information/deliverables during the review process.

ESAT shall be aware that some of the analytical methods are proprietary and may find the need to utilize their professional experience, knowledge, and judgment to assess the data. ESAT shall be aware that this is sensitive data.

Any questions or concerns that may arise shall be discussed with the Technical Monitors.

ESAT may be required to participate in meetings or conference calls to discuss the technical aspects regarding the data

Deliverables

Data Validation Reports within 48 hours of receipt of the data.

The Technical Monitors: Ed Messer, J. Burman, Mike Mahoney, Fred Foreman, Brandon McDonald, Cynthia Caporale, and Terry Simpson.

I CERTIFY THAT THIS TECHNICAL DIRECTIVE DOES NOT REQUEST SERVICES THAT ARE INHERENTLY GOVERNMENTAL FUNCTIONS AND THAT IT DOES NOT ALTER THE (1) STATEMENT OF WORK, (2) LEVEL OF EFFORT, (3) COST OF PERFORMING THE AUTHORIZED WORK, (4) NUMBER OF DELIVERABLES, OR (5) THE DUE DATES OF DELIVERABLES FOR THE ABOVE REFERENCED TASK ORDER.

TOPO Signature Colleen K. Walling Date 2/3/2012

Original to Contractor
cc: TOPO file Project Officer Contracting Officer

Environmental Protection Agency Office of Emergency and Remedial Response **TECHNICAL DIRECTION FORM** **Region 3 - ESAT**	Contract No.: EP-W-06-016 Contractor: Lockheed/Martin Srvcs Inc. Task Order No.: 0037 Sub-Task No.: Technical Direction No. 01079

Task Order Project Officer: Colleen K. Walling Phone: (410) 305-2763

Description of Task: Provide Data Review Data Validation other related DV support tasks for the Dimock Site fast turn-around-time analyses & data review - Highest Priority

Account Number: 2012T03N303DC6A3TARS00 (CEW)

Deliverable Due Date: for 2/1/2012 – 2/14/2012 48 hr TAT from receipt of data

TASK DESCRIPTION: **DIMOCK Site** **High Priority**

ESAT shall perform data validation and data review including related support task activities as highest priority fast turnaround time within 48 hrs or less for this Superfund site for the parameters listed in the attachments.

ESAT shall follow the SOPs, Task Order SOW, and all guidance documents to the best of their ability, and utilize their technical expertise for review of data received from Tier IV, 3rd party outside laboratories for the parameters listed in the attachments.

ESAT shall discuss with the Technical Monitors any concerns or anomalies with the data.

ESAT shall not hold up the data review process to perform the CEAT audits. The CEAT audits can be performed at a later date after the data reviews/data validations have been completed. However, ESAT shall note missing information/deliverables during the review process.

ESAT shall be aware that some of the analytical methods are proprietary and may find the need to utilize their professional experience, knowledge, and judgment to assess the data. ESAT shall be aware that this is sensitive data.

Any questions or concerns that may arise shall be discussed with the Technical Monitors.

ESAT may be required to participate in meetings or conference calls to discuss the technical aspects regarding the data assessment.

Deliverables

Data Validation Reports within 48 hours of receipt of the data.

The Technical Monitors: Ed Messer, J. Burman, Mike Mahoney, Fred Foreman, Brandon McDonald, Cynthia Caporale, and Terry Simpson.

I CERTIFY THAT THIS TECHNICAL DIRECTIVE DOES NOT REQUEST SERVICES THAT ARE INHERENTLY GOVERNMENTAL FUNCTIONS AND THAT IT DOES NOT ALTER THE (1) STATEMENT OF WORK, (2) LEVEL OF EFFORT, (3) COST OF PERFORMING THE AUTHORIZED WORK, (4) NUMBER OF DELIVERABLES, OR (5) THE DUE DATES OF DELIVERABLES FOR THE ABOVE REFERENCED TASK ORDER.

TOPO Signature Colleen C. Walling Date 2/2/2012

Original to Contractor
cc: TOPO file Project Officer Contracting Officer

R33917, Dimock Residential GW site: proprietary methods

Ex. 4 - CBI to: Colleen Walling 01/23/2012 11:31 AM

Cc: Ex. 4 - CBI

Dear Colleen,

The parameters for DAS R33917 include three methods which are proprietary and belong to Isotech, the lab which will be analyzing the samples. If ESAT is to validate the data from these proprietary methods, we will need access to the methods. Would you please look into this situation and let us know how you wish to proceed? Thank you very much.

****

Ex. 4 - CBI
ESAT Auditor, Region 3
Lockheed Martin Enterprise Solutions & Services
701 Mapes Road
Ft. Meade, MD 20755-5350
Ex. 4 - CBI

ISOTECH®
ISOTECH LABORATORIES INC
1308 Parkland Court Champaign, IL 61821 • (877) 362-4190 • www.isotechlabs.com

Collection of Ground Water Samples from Domestic and Municipal Water Wells for Dissolved Gas Analysis

These instructions are based on sampling protocol created by Anthony Gorody, adopted by the Colorado Oil and Gas Conservation Commission, and are reproduced here with their permission.

The basic technique is to fill a white 5 gallon bucket with source water and then fill the 1 liter sample collection bottle fully immersed in the bucket.

When sampling from a pressurized water system, it is recommended to use an outdoor spigot or other source which bypasses any water treatment systems (i.e. water softeners, etc.).

To collect a sample for isotopic and chromatographic analysis from water that is not effervescent, using 1L bottle with septum cap:

After purging the well, fill the 5 gallon bucket with water. Attach a nozzle and 12" length of ¼ inch diameter tubing to the end of the 5/8 inch hose connected to a faucet. Make sure that the flow rates through the tubing are low. Remove the cap of the 1 L bottle and fill it with water. Once the bottle filled, immerse it in the 5 gallon bucket full of water, keeping the tubing at the bottom of the bottle. Place the bottle at the bottom of the bucket under a head of water, and keep water flowing at a low rate until another 2 volumes of water have been displaced from the bottle. Then slowly lift the tubing out of the bottle and immediately cap it under water. No air should be allowed into the 1 L bottle. When finished, tape the cap to the bottle around the neck, pack the bottle upside down in ice, and ship it overnight.

To collect a headspace gas sample from an effervescent water well:

Fill the bottle with water. Submerge the bottle into the 5 gallon bucket filled with well water and invert it. Insert the ¼ inch tubing into the bottle, increase the flow rate to 2-3 gpm and allow the bubbling gases to displace water in a headspace until 1/4 to 1/2 of the water in the bottle has been displaced. Seal the container under water with the septum and screw cap, tighten it securely. When finished, tape the cap to the bottle around the neck, pack the bottle upside down in ice, and ship it overnight.

Please note Isotech's receiving hours of **Monday thru Friday** 8:00 am to 4:30 pm.
Ship samples to:

Isotech Laboratories, Inc.
1308 Parkland Court
Champaign, IL 61821

These instructions have been provided to simplify the collection of samples for dissolved gas analysis. Although we try to foresee and avoid problems in the field, it is never possible to predict every situation. If you encounter any difficulties, or if any additions or changes in these instructions would be beneficial, please let us know. Isotech Laboratories, Inc. makes no warrantee as to the applicability and/or safety of the procedures described herein.

Expedited TATs for Dimock
Nance, Gene
to:
Dan Slizys, John Kwedar, Carroll Harris
01/12/2012 12:37 PM
Cc:
Fred Foreman, Stevie Wilding, Kevin Martin, Cynthia Caporale, "Graves, Suddha", Richard Rupert, "Carter, Joe"
Hide Details
From: "Nance, Gene" <Gnance@TechLawInc.com> Sort List...

To: Dan Slizys/ESC/R3/USEPA/US, John Kwedar/ESC/R3/USEPA/US@EPA, Carroll Harris/ESC/R3/USEPA/US@EPA

Cc: Fred Foreman/ESC/R3/USEPA/US@EPA, Stevie Wilding/ESC/R3/USEPA/US, Kevin Martin/ESC/R3/USEPA/US@EPA, Cynthia Caporale/ESC/R3/USEPA/US@EPA, "Graves, Suddha" <Sgraves@TechLawInc.com>, Richard Rupert/R3/USEPA/US, "Carter, Joe" <Jcarter@TechLawInc.com>

1 Attachment

Dimock_OASQA_DAS Request_REV01_01122012.doc

Dan,
Attached is a revision/clarification of the DAS analytical request for Dimock. OSC Rupert clarified that the expedited TAT needed for the specified list of parameters should be 5 days. Also, I omitted the RSK-175 parameters from the list of compounds/analytes requiring expedited TATs (mentioned in 'Special Instructions' box of initial request).

To summarize, a 5-day TAT for preliminary results is desired/requested for the following compounds/analytes:

- Methane, ethane, ethene (RSK-175);
- bis(2-ethylhexyl) phthalate (DEHP) (part of SVOC analysis by OLC03.2);
- aluminum, arsenic, lithium, manganese, sodium, iron (part of total metals analysis);
- 2-methoxyethanol (Ethylene glycol monomethyl ether);

- ethylene glycol; and
- triethylene glycol, and 2,2'oxybisethanol (diethylene glycol).

Thanks.

Gene Nance
TechLaw, Inc.
740.867.0968 (office)
304.830.1442 (mobile)

10.0 DELIVERABLES

The following deliverables will be provided under this project:

Analytical Data

- Expedited preliminary data turnaround time (<5 days) will be provided on the following list of compounds/tests:

coliform bacteria	aluminum
bis(2-ethylhexyl) phthalate (DEHP)	arsenic
ethylene glycol	lithium
2-methoxyethanol (Ethylene glycol monomethyl ether)	manganese
methane	sodium
2,2'oxybisethanol (diethylene glycol)	iron
triethylene glycol	

- With exceptions listed above, preliminary unvalidated data will be provided to the EPA OSC within 15 business days after receipt of the samples at the laboratory.

- A Data Validation Report will be provided to the EPA OSC within approximately 21 days of receipt of the laboratory analytical data package by TechLaw.

- TechLaw will incorporate the validated data from this sampling event into a Trip Report and/or After Action Report for the project.

11.0 REFERENCES

EPA, 2011. U.S. Environmental Protection Agency, *Contract Laboratory Program (CLP) Guidance for Field Samplers, Final*, Office of Solid Waste and Emergency Response (OSWER) publication EPA540-R-07-006, Washington, D.C. January.

ERT, 1994. U.S. Environmental Protection Agency Environmental Response Team. Standard Operating Procedure for Surface Water Sampling, SOP# 2013. January 26.

ERT, 1995. U.S. Environmental Protection Agency Environmental Response Team. Standard Operating Procedure for Groundwater Well Sampling, SOP# 2007. January 26.

Isotech, 2011. Isotech Laboratories, Inc., Collection of Ground Water Samples from Domestic and Municipal Water Wells for Dissolved Gas Analysis, Website Accessed December 2011:
< http://www.isotechlabs.com/customersupport/samplingprocedures/DGbottle.pdf>

U.S EPA Region III Analytical Request Form

Revision 11.09

OASQA USE ONLY			
Control #	**CT5878**	**RAS #**	
DAS#	**R33917**	**NSF #**	
PES #		**Analytical TAT**	**14 DAYS**

Date: 01/20/2012 **revised 1/31/12**	Site Activity: Removal Site Evaluation			
Site Name: Dimock Residential Groundwater Site		Street Address: PA RT 229 @ 2024		
City: Dimock	State: PA 18847	Latitude:		Longitude:
Program: Superfund	Acct. #: 2012 T03N303DC6A3TARS00		CERCLIS #: Unknown	
Site ID: N/A	Spill ID: A3TA		Operable Unit:	
Site Specific QA Plan Submitted: ☐ No ☒ Yes	Title: Residential Well Sampling QA/QC Work Plan			Date Approved: January 8, 2012
EPA Project Leader: Rich Fetzer	Phone#: 215-341-6307	Cell Phone #: 215-341-6307		E-mail: fetzer.richard@epa.gov
Request Preparer: Gene Nance	Phone#: 740-867-0968	Cell Phone #: 304-830-1442		E-mail: gnance@techlawinc.com
Site Leader: Suddha Graves	Phone#: 304-230-1230	Cell Phone #: 304-830-1441		E-mail: sgraves@techlawinc.com
Contractor: TechLaw, Inc.		EPA CO/PO: Denise T. Jones/Karen Esposito		
#Samples: up to 130	Matrix: drinking water	Parameter: Coliform – Total and Fecal		Method: SM 9222B
#Samples: up to 130	Matrix: drinking water	Parameter: Heterotrophic Plate Count (Bacteria)		Method: SM 9215B
# Samples: up to 130	Matrix: drinking water	Parameter: Ethylene glycol		Method: SW846 8015M
#Samples 20	Matrix: drinking water	Parameter: compositional analysis of headspace gas – GC MS		Method: Isotech proprietary method
#Samples 20	Matrix: drinking water	Parameter: d^{13} C and d^{2} H of methane		Method: Isotech proprietary method
#Samples 20	Matrix: drinking water	Parameter: Stable isotopes of water (O, H)		Method: Isotech proprietary method
#Samples **30**	Matrix: **drinking water**	Parameter: **Glycols**		Method: **SW846 8015M**
Ship Date From: Jan 30, 2012	Ship Date To: March 2, 2012	Org. Validation Level M3		Inorg. Validation Level
Unvalidated Data Requested: ☐ No ☐ Yes If Yes, TAT Needed: ☐ 24hrs ☐ 48hrs ☐ 72hrs ☐ 7days ☐ Other (Specify) **not applicable**				
Validated Data Package Due: ☒ 14 days ☐ 21 days ☒ 35 days ☐ 42 days ☐ Other (Specify) **14-day TAT-bacteria; 35-day ethylene glycol and headspace/isotopes**				
Electronic Data Deliverables Required: ☐ No ☒ Yes (EDDs will be provided in Region 3 EDD Format) if available				

Special Instructions: Request for data validation of Tier IV data.

- Compositional headspace gas analysis, d^{13} C and d^{2} H of methane, and Stable isotopes of water (O, H) analysis will be performed by Isotech Laboratories, Inc, located in Champaign, IL using proprietary methods. Isotech QAPP is attached.
- Bacteria: Coliform (Total and fecal) and heterotrophic plate count (HPC).
- Ethylene glycol analysis by Pace Analytical, Indianapolis Laboratory.
- **Glycols analysis by TestAmerica Buffalo.**

FORM ARF- 03/05